

CLAIMS

1. A method of operating gaming devices interconnected by a computer network to a host computer comprising:

5 sending a reconfiguration command from the host computer to a gaming device over the network;

receiving the reconfiguration command at the gaming device; and

reconfiguring the gaming device responsive to the received reconfiguration command, wherein the gaming device reconfigures its payout schedule in accordance with the received reconfiguration command.

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2. A method of operating gaming devices according to claim 1 wherein the step of reconfiguring the gaming device includes reconfiguring the payout to be a multiple of a default payout schedule.

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3. A method of operating gaming devices according to claim 2 wherein the step of reconfiguring the gaming device includes reconfiguring the payout to be double the default payout schedule.

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4. A method of operating gaming devices according to claim 2 wherein the step of reconfiguring the gaming device includes limiting the multiple payout schedule to a predetermined percentage of the total gaming device handle.

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5. A method of operating gaming devices according to claim 2 wherein the step of reconfiguring the gaming device includes limiting the multiple payout schedule to a predetermined percentage of the coins in.

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6. A method of operating gaming devices according to claim 2 wherein the step of reconfiguring the gaming device includes limiting the multiple payout schedule to payout only when maximum coins are played.

5 7. A method of operating gaming devices according to claim 2 wherein the step of reconfiguring the gaming device includes limiting the multiple payout schedule to payout only when an award falls within a predetermined range.

10 8. A method of operating gaming devices according to claim 2 wherein the step of reconfiguring the gaming device includes limiting the multiple payout schedule to payout only when a predetermined level of activity is reached.

15 9. A method of operating gaming devices according to claim 1 further comprising:

selecting two or more gaming devices on the network to be combined in a common jackpot having a common jackpot payout schedule;

20 wherein the step of sending a reconfiguration command includes sending a reconfiguration command to each of the selected gaming devices; and

wherein the step of reconfiguring the gaming device includes reconfiguring the selected gaming devices to payout out in accordance with the common jackpot payout schedule.

25 10. A method of operating gaming devices according to claim 9 wherein the step of reconfiguring the gaming device includes reconfiguring the selected gaming devices to payout out in accordance with the common, progressive jackpot payout schedule.

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11. A method of operating gaming devices according to claim 1 wherein the step of sending a reconfiguration command includes sending a reconfiguration command describing a progressive jackpot payout schedule to each of the selected gaming devices.

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12. A method of operating gaming devices according to claim 1 wherein the step of reconfiguring the gaming device includes reconfiguring the payout to be an automatic mystery payout.

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13. A method of operating gaming devices according to claim 12 wherein the step of sending a reconfiguration command from the host computer to a gaming device via the network includes sending a reconfiguration command specifying the playing conditions under which the automatic mystery payout will payout.

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14. A method of operating gaming devices according to claim 1 wherein the step of sending a reconfiguration command from the host computer to a gaming device via the network includes:

detecting the time of day; and

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sending the reconfiguration command from the host computer to a gaming device via the network when the detected time equals a predetermine time.

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15. A method of operating gaming devices according to claim 14 further comprising inputting the predetermined time on the host computer.

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16. A method of operating gaming devices according to claim 1 further comprising:

5 sending a status request from the host computer to a gaming device;
and
transmitting accounting data from the gaming device to the host
computer.

17. A method of operating gaming devices according to claim 16
further comprising:

detecting a player associated with a gaming device;
sending a player identification number from the gaming device to
10 the host computer over the network; and
associating the accounting data with the player identification
number for player tracking purposes.

18. A method of operating gaming devices according to claim 17
15 further comprising:

sending a command including a credit amount from the host
computer to the gaming device associated with the player; and
crediting the gaming device with the credit amount responsive to
receipt of the command to provide cashless play.

20 19. A method of operating gaming devices interconnected by a
computer network to a host computer comprising:

detecting a player associated with a gaming device;
sending a player identification number from the gaming device to
25 the host computer over the network;
sending a status request from the host computer to a gaming device;
transmitting accounting data from the gaming device to the host
computer over the same network; and
associating the accounting data with the player identification
30 number for player tracking purposes.

20. A method of operating gaming devices according to claim 19 further comprising reconfiguring a gaming device over the network, wherein the reconfigured gaming device modifies a jackpot payout schedule associated therewith.

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21. A method of operating gaming devices interconnected by a computer network to a host computer, the method comprising:

detecting a player associated with a gaming device;

10 sending a reconfiguration command from the host computer to the player's gaming device via the network;

receiving the reconfiguration command at the player's gaming device; and

15 reconfiguring the player's gaming device responsive to the received reconfiguration command, wherein the player's gaming device reconfigures its payout schedule in accordance with the received reconfiguration command.

22. A method of operating gaming devices according to claim 21 wherein the step of reconfiguring the player's gaming device responsive to receipt of the reconfiguration command includes adding an extra bonus to the payout schedule.

23. A method of operating gaming devices according to claim 21 wherein the step of reconfiguring the player's gaming device responsive to receipt of the reconfiguration command includes adding a progressive jackpot to the payout schedule.

24. A method of operating gaming devices according to claim 21 further comprising determining whether the player satisfies a predetermined criteria.

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25. A method of operating gaming devices according to claim 24 wherein the step of determining whether the player satisfies a predetermined criteria includes determining whether the player is a member of a club.

26. A method of operating gaming devices according to claim 24 wherein the step of determining whether the player satisfies a predetermined criteria includes determining whether the player has reached a predetermined level of activity.

27. A method of operating gaming devices according to claim 26 wherein the step of determining whether the player has reached a predetermined level of activity includes:

detecting the level of activity and the time period over which the activity occurs; and

transmitting the activity level and the time period to the host computer via the network.

28. A system for operating a plurality of gaming devices having serial interfaces, the system comprising:

a host computer;

a network interconnecting the gaming devices to the host computer;

means within the computer for transmitting a reconfiguration command to a gaming device;

means within each gaming device for receiving the reconfiguration command transmitted to the gaming device; and

means within each gaming device for reconfiguring the gaming device responsive to the received reconfiguration command, wherein the

gaming device reconfigures its payout schedule in accordance with the received reconfiguration command.

5 29. A system for operating a plurality of gaming devices according to claim 28 comprising:

means within each gaming device for identifying a player associated with each gaming device;

10 means within each gaming device for sending the player identity from the player's gaming device to the host computer via the network; and

means within the host computer for receiving the player identity.

15 30. A system for operating a plurality of gaming devices according to claim 29 wherein the means within the computer for transmitting a reconfiguration command to each one of the gaming devices includes means within the computer for transmitting a reconfiguration command to the player's gaming device responsive to the received player identity.

20 31. A system for operating a plurality of gaming devices according to claim 28 wherein the host computer comprises at least one floor controller.

25 32. A system for operating a plurality of gaming devices according to claim 31 wherein the host computer comprises a file server.

33. A system for operating a plurality of gaming devices according to claim 32 wherein the network comprises:

30 a current loop network coupled between the floor controller and a plurality of associated gaming devices; and

a high-speed network coupled between the floor controller and the file server.

5 34. A system for operating a plurality of gaming devices according to claim 33 wherein the network includes a plurality of current loop networks, and

wherein the floor controller includes a communication board having a plurality of current loop interfaces for coupling to the plurality of current loop networks, the communication board having a plurality of
10 microprocessors, each microprocessor responsible for the transmissions on an associated current loop network, the communication board including a current loop driver interposed between the plurality of microprocessors and the plurality of current loop networks.

15 35. A system for operating a plurality of gaming devices according to claim 28 wherein the means within each gaming device for receiving the reconfiguration command transmitted to the gaming device comprises a data communication node coupled to the network and coupled to the serial interface of the associated gaming device, wherein the data
20 communication node monitors the transmissions on the network and determines which transmission is transmitted to the associated gaming device.

25 36. A system for operating a plurality of gaming devices according to claim 35 wherein the data communication node includes:

a controller;

a serial machine interface coupled between the controller and the serial interface of the associated gaming device for receiving data from the associated gaming device and transmitting the received
30 reconfiguration command to the gaming device.

37. A system for operating a plurality of gaming devices according to claim 28 including a non-volatile memory within each gaming device for storing a unique gaming device identification number to uniquely identify the gaming device on the network.

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38. A system for operating a plurality of gaming devices according to claim 37 including:

means within each gaming device for reading the unique gaming identification number; and

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means within each gaming device for transmitting the unique gaming identification number to the host computer.

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39. A system for operating a plurality of gaming devices according to claim 37 including a machine configuration circuit for identifying the type of gaming device.

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40. A method of providing feedback to a user inserting a user identification card having a unique user identification number encoded thereon into a gaming device, the method comprising:

receiving the card into a card reader opening;

sensing the number on the card;

determining whether the sensed number is a valid identification number; and

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providing feedback to the user adjacent the card reader opening, the feedback comprising a positive feedback signal if the sensed number is a valid identification number and a negative feedback signal if the sensed number is not a valid identification number.

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41. A method of providing feedback to a user according to claim 40 wherein the step of providing feedback to the user adjacent to the card

reader opening includes providing visual feedback around the card reader opening.

42. A method of providing feedback to a user according to claim 41 wherein the step of providing feedback to the user adjacent to the card reader opening includes providing a first visual signal having a first color if the sensed number is a valid identification number and a second visual signal having a second color, different from the first color, if the sensed number is not a valid identification number

43. A method of providing feedback to a user according to claim 42 wherein the step of providing a first visual signal having a first color if the sensed number is a valid identification number includes providing a first visual signal having a green color if the sensed number is a valid identification number; and

wherein the step of providing a second visual signal having a second color if the sensed number is not a valid identification number includes providing a second visual signal having a red color if the sensed number is not a valid identification number.

44. A method of providing feedback to a user according to claim 42 wherein the step of determining whether the sensed number is a valid identification number includes providing a third visual signal having a third color, different from the first and second colors, during the pendency of the determining step.

45. A method of providing feedback to a user according to claim 41 wherein the step of providing feedback to the user adjacent to the card reader opening includes actuating a plurality of light emitting diodes arranged around the card reader opening.

46. A method of providing feedback to a user according to claim 40 wherein the step of determining whether the sensed number is a valid identification number includes comparing to a plurality of predetermined valid identification numbers.

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47. A card reader having user feedback which reads a user identification card having a user identification number encoded thereon comprising:

10 a bezel defining a card reader opening;
means for sensing the user identification number on the card;
means for determining whether the sensed number is a valid identification number; and
means for providing visual feedback to the user adjacent the card reader opening, the visual feedback comprising a first visual signal if the
15 sensed number is a valid identification number and a second visual signal if the sensed number is not a valid identification number.

48. A card reader having user feedback according to claim 47 wherein the means for providing visual feedback includes a plurality of
20 light emitting diodes disposed around the card reader opening.

49. A card reader having user feedback according to claim 48 wherein the light emitting diodes include dual light emitting diodes for producing both the first and the second visual signals.

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50. A card reader having user feedback according to claim 47 wherein the user identification card includes a plurality of holes which encode the user identification number and which are arranged in columns and wherein the means for sensing the user identification number on the
30 card includes an optical card reader.

51. A card reader having user feedback according to claim 50 wherein the optical card reader includes:

a plurality of light emitting diodes disposed on a first side of the card reader opening; and

5 a plurality of photodetectors disposed on a second side of the card, opposite the first side for detecting the light emitted by the plurality of light emitting diodes.

52. A card reader having user feedback according to claim 51
10 wherein the light emitting diodes and the photodetectors are arranged in opposing pairs for detecting the holes of a respective column.

53. A card reader having user feedback according to claim 47 further including:

15 means for detecting the orientation of the card; and

wherein the means for determining whether the sensed number is a valid identification number transposes the sensed number according to the orientation detected by the detection means.

20 54. A card reader having user feedback according to claim 47 further including first and second guide members disposed on opposing lateral sides of the card reader opening for guiding a user identification card therealong.

25 55. A method of operating gaming devices interconnected by a computer network to a host computer comprising:

monitoring the activity of the gaming devices;

detecting the amount of money played on the gaming devices;

30 allocating a predetermined percentage of the money played to a bonus pool;

determining the level of the bonus pool; and
activating a bonus payout table in a gaming device when the bonus
pool level exceeds a turn-on level.

5 56. A method of operating gaming devices interconnected by a
computer network to a host computer according to claim 55 comprising
deactivating the bonus payout table when the bonus pool falls below a
turn-off level.

10 57. A method of operating gaming devices interconnected by a
computer network to a host computer according to claim 55 comprising:
determining the time period since the last bonus table activation;
and
deactivating the bonus payout table when the time period exceeds
15 a minimum period of time.

20 58. A method of operating gaming devices interconnected by a
computer network to a host computer according to claim 55 comprising:
determining the level of play for a gaming device;
deactivating the bonus payout table in the gaming device when the
level of play falls below a predetermined level.

25 59. A method of operating gaming devices interconnected by a
computer network to a host computer according to claim 58 comprising:
determining the time of day;
deactivating the bonus payout table when the time of day is not
within a predetermined period of time.

30 60. A method of operating gaming devices interconnected by a
computer network to a host computer according to claim 55 comprising:

detecting the amount of money paid out as bonuses on the gaming devices;

modifying the bonus pool by the amount of money paid out as bonuses;

5 determining the level of the bonus pool; and

deactivating a bonus payout table in a gaming device when the bonus pool level falls below a turn-off level.

61. A method of operating gaming devices interconnected by a
10 computer network to a host computer according to claim 60 wherein the turn-on level is above the turn-off level.